Remarks

For the Drawings:

In **Section 2**, the Office Action objects to the drawings due to the following errors:

Section 2.A)(1): indicates that the drawings are objected to, and further indicates that the subject matter of claims 1-8, in regard to each of the particular functions recited in the steps of the claimed method, must be shown in the drawings. The Office Action fails to provide specificity with regard to which functions recited in the claims may not be shown. Accordingly, Applicant cannot respond directly to this drawing objection. However, in light of the modifications to the drawings, specification, and claims (as discussed below), Applicant presumes that this objection to the drawings is overcome.

Section 2.B)(1): indicates that the drawings lack Fig. 5B as disclosed in paragraph [0117]. Paragraph [0117] of the specification has been amended by deleting "Fig. 5B" and inserting –Fig. 9– therefore to correct a minor typographical error.

Section 2.B)(2): alleges that Fig. 12 does not depict what is disclosed in paragraph [0134], formerly paragraph [0136]. The original figure 12 is being replaced with a proposed replacement Figure 12. The proposed replacement Figure 12 depicts what was disclosed in paragraph [0134] of the specification (formerly paragraph [0136]) and clarifies the flow of tasks. The proposed replacement Figure 12 includes no new matter.

Section 2.B)(3)(a): alleges that the drawings are objected to because they include reference numbers 112, 113, 114, and 115 (Fig. 3) that are not described in the specification. Paragraph [0073] of the specification has been amended to associate the Constraint Mapping routine with reference number 112, the Preprocessing routine with reference number 113, and the Scenario Analysis routine with reference number 114. In addition, paragraph [0073] of the specification has been amended to associate the data lists with reference number 115 and the Table portion with reference number 116. No new matter is being added. Consequently, the objection to Fig. 3 has been overcome.

The following modifications to the figures were also made in order to maintain consistency between the figures and the specification. No new matter is being added.

In Figure 8, reference number 112 was added to correlate the Constraint Mapping routine first represented in Fig. 3 with the methodology of Figure 8 described in the specification in paragraphs [0102] through [0120].

In Figure 11, reference number 113 was added to correlate the Preprocessing routine first represented in Fig. 3 with the methodology of Figure 11 described in the specification in paragraphs [0121] through [0128].

In proposed replacement Figure 12, reference number 114 was added to correlate the Scenario Analysis routine first represented in Figure 3 with the methodology of Figure 12 described in the specification in paragraphs [0129] through [0145].

In Figure 13, reference numbers 1503, 1504, and 1505 were added, and correspondingly reference numbers 1503, 1504, and 1505 were added to the specification at paragraphs [0151] and [0152] to correlate the tasks presented in Figure 13 with the text disclosed in paragraphs [0151] and [0152].

In Figure 16, an "X" is added to correspond with the specification at paragraph [0146], which includes the disclosure of "then having the system optimize prices such that the point X on the graph is attained, realizing a profit of $38,000."

Section 2.1 and 2.2: Require proposed drawing corrections in reply to the Office Action. A clean copy of each drawing page containing the amended Figures 8, 11, 12, 13, and 16 is appended hereto in Appendix D.

Formal drawings, including all of the above-identified modifications, will be submitted some time after approval of the proposed changes.

For the Specification:

In **Section 3**, the Office Action objects to the specification due to the following informalities:

Section 3.A)(1): alleges that Applicant must update the continuing data on page 1, with the current status of each of the referenced applications. The specification was modified to indicate that the referenced application, Serial Number 09/951,334, is "still pending."

Section 3.B)(1): alleges that the specification lacks an explicit reference to the nature of reference legend(s) 112, 113,

114, and 115 of Figure 3. As discussed above, paragraph [0073] of the specification has been amended to provide reference to the nature of reference numbers 112, 113, 114, 115, and 116.

Section 3.C)(1): indicates that the last sentence of paragraph [0030] lacks a period. The last sentence of paragraph [0030] has been amended to include a period.

Section 3.C)(2): indicates that in the last line of paragraph [0117], the reference to "Fig. 5B" should be -Fig. 9-. Paragraph [0117] has been amended accordingly to refer to Fig. 9.

Section 3.D)(1): indicates that the subject matter of claim 6, with regard to "said weighting factors adjusting an effect that said constraint function has on said effective objective function," lacks antecedent basis within the specification. Claim 6 has been amended by replacing the term "effective objective function" with the term -objective function-. The Examiner is respectfully requested to review paragraphs [0106] through [0115] of Applicant's specification which provides antecedent basis for the subject matter of amended claim 6.

Section 3.D)(2): indicates that the subject matter of claim 7, with regard to "said representing operation defines said strategic constraint to be non-limited by said physical constraints of said enterprise planning model," lacks antecedent basis within the specification. The Examiner is respectfully requested to review paragraph [0079] of Applicant's specification which discloses "the primary goal/objective is subject to actual physical limitations/constraints whereas there are no direct physical constraints on the strategic objective".

The Examiner is further respectfully requested to review
paragraph [0098] of Applicant's specification which provides an
example of adding a strategic objective to an enterprise planning
model. In particular, Applicant's describe a "price image" as an
example of a strategic constraint that does not correspond to any
physical constraint, i.e., is "non-limited by said physical
constraints of said enterprise planning model." Paragraph [0098]
further discloses that the strategic constraint/objective
represents a higher-level property that a user would like to be
able to choose and control with precision.

Paragraph [0102] sets forth the advantages of the strategic
constraint being non-limited by the physical constraints of the
enterprise planning model. In particular, paragraph [0102]
discloses that "Because a strategic constraint (Strategic
Objective), such as price image, does not represent a physical
restriction on the system, it is not necessary that it be met
rigorously. Rather, it is more desirable to vary the constraint
over a range of scenarios, and then determine which set of
predicted decisions aligns most favorably with the Primary Goal
and the Strategic Objective." Thus, the user can have control
over the decision being made, without being locked to a single
set of decisions. By obtaining solutions over a broad range of
scenarios, the user obtains a picture of how the optimal
predictions vary according to changes in the desired large-scale
goal (i.e., the strategic objective). Consequently, Applicant
believes that sufficient antecedent basis for the subject matter
of claim 7 has been provided in Applicant's specification.

Section 3.D)(2): indicates that the subject matter of claim 8
lacks antecedent basis within the specification. This Amendment
cancels claim 8. Accordingly, the objection to claim 8 is no
longer relevant.

Section 4: indicates that Applicant's cooperation is requested in correcting any errors which Applicant may become aware in the specification or drawings. Applicant amends the original specification and submits a substitute specification herewith to correct minor grammatical and clerical errors, to correct inconsistencies and/or lack of correspondence between reference numerals used in the specification and those used for different elements, and to further clarify the specification. These amendments add no new matter.

In addition, Applicant amends the original Abstract to more closely relate to the subject matter recited in the claims. No new matter is being added.

For the Claims:

Applicant submitted claims 1-8. This Office Action rejects claims 1-8. Applicant cancels claim 8, amends claims 1, 3, 5, and 6, adds claim 9, and retains claims 2, 4, and 7 as originally submitted. Applicant respectfully requests reconsideration in view of the following remarks.

In **Section 5**, the Office Action rejects claims 1-8 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which Applicant regards as the invention. Subsections of Section 5 specify the U.S.C. §112, second paragraph, rejections as follows:

Section 5.1: In regard to claims 1-8, as recited in claim 1, the method obtains the "economic cost of implementing a strategic constraint." The Office Action argues that since the remainder

of the claim fails to either consider or associate a cost/value with any of the claimed features, it is unclear how the cost of the strategic constraint can be obtained as required by the language of the claim.

The term "cost" in originally filed claim 1 is explained in paragraph [0027] in which strategic objectives can be compared so that the manager has advance knowledge of the <u>cost</u> of the strategic decisions made. The model helps to select the strategy based on the <u>cost</u> of the strategy. In addition, paragraph [0079] discloses that by looking at how the primary objective is altered by the strategic objective, the manager can obtain a clear picture of the economic cost of implementing the strategic objective. Consequently, the term "cost," as described in the specification, was intended to represent the "effect" or the "tradeoffs" involved with the selected strategic objectives, rather than any actual value. As such, the invention allows the manager to see, or visualize, these "effects" or "tradeoffs" involved with the selected strategic objective(s).

Notwithstanding the above explanation of the terms "cost" and "economic cost" utilized in Applicant's specification, claim 1 is being amended to more clearly point out that which Applicant regards as the invention. In addition, claims 3 and 5 are also being amended to more clearly point out Applicant's invention. With particular regard to claim 1, independent claim 1 has been amended in the preamble to recite a method for visualizing an effect of a strategic constraint on a primary goal of an enterprise. Consistent with the modification to the preamble, claim 1 includes the limitations of determining outcomes of the primary objective function in response to the target values for the constraint function, and presenting a graphical view of the outcomes of the primary objective function for the target values of the constraint function to provide a visualization of the

effect of the strategic constraint on the primary goal of the
enterprise.

The limitations of amended independent claim 1 are well
supported in Applicant's specification in connection with the
Goal Selection section beginning at paragraph [0097] through the
Constraint Mapping routine ending at paragraph [0120], and in
further connection with Figures 1, 6-9, and 16. The invention of
claim 1 presents to the user an intuitive graphical view of the
dependence of the primary goal on the target value of the
strategic objective.

Section 5.2: alleges that the subject matter of claims 6, 7,
and 8 lack antecedent basis within the specification. Claims 6,
7, and 8 were discussed in detail above in connection with
sections **Section 3.D)(1)**, **Section 3.D)(2)**, and **Section 3.D)(3)**.
Accordingly, the above-presented discussion need not be repeated
herein. Rather, as presented above, amended claim 6 and
originally presented claim 7 do have antecedent basis within the
specification, and claim 8 has been canceled.

Section 5.3: concludes that for the above reasons, Applicant
has failed to particularly point out what is regarded as the
invention. In light of the modifications to claims 1, 3, 4, and
6, the cancellation of claim 8, and the above discussion,
Applicant believes that the rejections of claims 1-8 under 35 USC
§112, second paragraph, are overcome.

In **Section 6**, the Office Action examines claims 1-8 in light
of the provisions of 35 U.S.C. §101. Subsections of Section 6
specify the U.S.C. §101 rejection as follows:

Section 6.1.1: indicates that although the claims recite 1) a
method which has a disclosed practical application, and 2) which
do not define either a computer program, a data structure, non-
functional descriptive material (mere data), or a natural
phenomenon, the claims merely define a series of steps to be
performed on a computer.

With reference to claim 1 and as discussed in connection with
Section 5.1, independent claim 1 is being amended to more clearly
point out that which that which Applicant regards as the
invention. In particular, claim 1 is being amended to include
the further limitations of the optimizing operation being
performed using a computing system, determining, from the
optimizing operation, outcomes of the primary objective function
in response to target values for the constraint function, and
presenting a graphical view of the outcomes of the primary
objective function for the target values of the constraint
function to provide a visualization of the effect of the
strategic constraint on the primary goal of the enterprise.
Again, the advantages and limitations of amended claim 1 are
taught in Applicant's specification at paragraph [0027], at
paragraphs [0097] through [0120], and in connection with Figures
1, 6-9, and 16.

The invention of amended claim 1 does not merely define a
series of steps to be performed on a computer. Rather, the
invention of claim 1 yields a real-world result, a graphical view
of outcomes of the primary objective function of an enterprise
planning model for the target values of a constraint function.
As such, strategic planning performed by a user, and its
implications, is facilitated with this graphical view of the
dependence of the primary goal on the target values of the

strategic constraint (paragraph [0027] of Applicant's specification).

Section 6.1.2: indicates that as recited in the originally filed claim 1, a hypothetical cost is not used or applied in such a manner so as to be tangibly used in a concrete manner and hence to produce a useful concrete and tangible result, that is, a tangible application within the technological/useful arts.

Regarding amended independent claim 1, the operations of determining, from the optimizing operation, an outcome of the primary objective function in response to each of the target values of the constraint function and presenting a graphical view of the outcome of the primary objective function for each of the target values of the constraint function constitute a practical application because it produces a "concrete and tangible result" – that ability to visualize the effect of the strategic constraint on the primary goal of the enterprise.

Since the claimed subject matter is "tangible and concrete," as discussed above, focus can then be directed towards its practical usefulness. The specification sets forth reasons that explain why the invention is believed useful. As discussed in detail in the Background of the Invention section at paragraph [0006], a problem exists with the use of model-based decision-making tools. As the decision-making process is automated, the operational decisions that are recommended by the model may begin to deviate from broader considerations that are not specifically built into the enterprise planning model. The reason for this is that an economic model can realistically succeed only on either a small scale or large scale, but not on both. Incorporating both small and large scale decisions into a single enterprise planning model would result in a model of enormous complexity, making the

optimization of the enterprise planning model computationally
impractical and economically inefficient.

Applicant's invention of claim 1 enables optimization of a
primary objective function in light of multiple target values of
a constraint function. The results are presented in graphic form
so that an optimum decision envelope can be visualized for the
selected primary goal in light of the selected strategic
constraint(s). This allows a user to see the tradeoffs involved
with the selected strategic objective(s). By comparing a number
of possible strategic objectives, a user has advance knowledge of
the cost, i.e., the effect, of the strategic decisions made.

Accordingly, an enterprise planning model, into which the
invention of claim 1 is incorporated, is useful for facilitating
the selection of a strategy based on visualizing the effect of
such a strategy. Moreover, additional flexibility is provided to
the user of the invention of claim 1 because the user may choose
the optimization method and even compare the results of various
optimization methods. Thus, the user can choose the optimization
method best suited to the characteristics of the specific
enterprise planning model being implemented (paragraph [0028]).

Section 6.1.3: indicates that Applicant has not recited in
the claims a specific process, machine, manufacture, or
composition of matter, or any new and useful improvement thereof,
which is either altered or changed or modified by the invention
recited in the claims.

The preamble of independent claim 1 was amended to recite "In
an enterprise planning model, a computer-based method for
visualizing an effect of a strategic constraint on a primary goal
of an enterprise." The specific process operations of selecting,

representing, optimizing, and determining, as recited in claim 1, yield a graphical view of the outcomes of a primary objective function for target values of a constraint function. This graphical view is presented to provide a visualization of the effect of the strategic constraint on the primary goal of an enterprise. Thus, the invention of claim 1 improves upon conventional enterprise planning models by taking into account the effect of strategic constraint on the primary goal of an enterprise.

Section 6.1.4: alleges that Applicant has not claimed either A) pre-computer processing or B) post-computer processing. Applicant believes that the modification to independent claim 1 addresses this concern by modifications made to the preamble and the inclusion of the presenting operation in amended claim 1.

Section 6.1.5: alleges that the invention of claims 1-8 merely manipulate the abstract idea of generating one or more data structures which are applied to an optimization process to obtain an estimated hypothetical cost. Applicant believes that the modification to independent claim 1 addresses this concern by modifications made to the preamble, the removal of limitations directed toward cost, and the inclusion of the presenting operation in amended claim 1.

Section 6.1.6: alleges that the invention of claims 1-8 lacks a claimed practical application since the claimed invention either A) does not have the functionality required to carry out the recited steps of the claimed invention; or B) is not used by any system or device or method outside of the claimed invention in a concrete and tangible manner.

As discussed above, the invention of claim 1 produces a
"concrete and tangible result" - that ability to visualize the
effect of the strategic constraint on the primary goal of the
enterprise. This visualization of the effect of the strategic
constraint on the primary goal is advantageously incorporated in
an enterprise planning model, and is useful for facilitating the
selection of a strategy based on visualizing the effect of such a
strategy.

Section 6.1.7: alleges that the type/nature of either the
data or the calculated numbers does not affect the operation of
the claimed invention and hence are considered to be non-
functional descriptive material. Applicant believes that the
modification to independent claim 1 addresses this concern by
modifications made to the preamble and the inclusion of the
presenting operation in amended claim 1.

Section 6.1.8: alleges that in claims define nonstatutory
processes if they A) consist solely of mathematical operations;
or B) simply manipulate abstract ideas without some claimed
practical application. Applicant believes that the modifications
made to independent claim 1 yield a claimed practical
application, namely, the presentation of a graphical view of the
outcome of the primary objective function for each of the target
values of the constraint function, the graphical view providing a
visualization of the effect of the strategic constraint on the
primary goal.

Section 6.1.9: concludes that claims 1-8 are directed to an
abstract exercise which is not in the technological arts, that
is, useful arts, and hence are directed to non-statutory subject
matter.

Applicant's invention of claim 1 constitutes a practical application because it produces a useful, concrete and tangible result. The useful result is the ability to visualize the effect of the strategic constraint on the primary goal of the enterprise. That is, results are presented in graphic form so that an optimum decision envelope can be visualized for the selected primary goal in light of the selected strategic constraint(s). This visualization of the effect of the strategic constraint on the primary goal is advantageously incorporated in an enterprise planning model, and is useful for facilitating the selection of a strategy based on visualizing the effect of such a strategy. This allows a user to see the tradeoffs involved with the selected strategic objective(s). By comparing a number of possible strategic objectives, a user has advance knowledge of the effect of the strategic decisions made and can more efficiently align and optimize an enterprise's operational decisions with its strategic constraints. Moreover, additional flexibility is provided to the user of the invention of claim 1 because the user may choose the optimization method and even compare the results of various optimization methods. Thus, the user can choose the optimization method best suited to the characteristics of the specific enterprise planning model being implemented while still taking into account the effect of any selected strategic constraints on the primary goal. Consequently, Applicant's invention of claim 1 is indeed drawn toward a statutory process. Accordingly, Applicant respectfully requests the withdrawal of the associated rejection of claim 1 under the provisions of 35 U.S.C. §101.

Claims 2-7 depend directly or indirectly from claim 1. As such, Applicant respectfully requests the withdrawal of the associated rejection of claims 2-7 under the provisions of 35 U.S.C. §101 for the reasons set forth above.

New claim 9, which depends from claim 1, adds further distinction to the invention of claim 1. In particular, claim 9 includes the limitation of generating the graphical view of the outcomes versus the target values to visualize a dependence of the primary goal on the target values of the strategic constraint. Applicant believes the invention of claim 9 is also drawn toward a statutory process, as set forth in detail above.

Section 7: alleges that in regard to the following prior art rejections listed in the Office Action and discussed herein below, since the economic cost of implementing the strategic constraint is not disclosed in the parent application (Pat. No. 6,308,162, the effective filing date of the claimed invention is 9 September 2001.

In light of the modifications made to the claims in the above-identified Application, the subject matter of the amended claims was presented in the parent application (Pat. No. 6,308,162). In particular, the subject matter was presented in the Goal Selection and Constraint Mapping sections of the parent application beginning at col. 4, line 65, through col. 8, line 48, and disclosed in connection with Figures 1-5, 10, and 11. Accordingly, Applicant respectfully requests that the subject matter of claims 1-8, as amended herein, be assigned the benefit of an effective filing date at least as early as 21 May 1998.

In **Section 8**, the Office Action examines claims 1-8 in light of the provisions of 35 U.S.C. §102. Subsections of **Section 8** specify the U.S.C. §102 rejections as follows:

Section 8.1: rejects claims 1-8 under 35 U.S.C. 102(b) as being clearly anticipated by *O'Brien*, International Publication

Number WO 95/26007. *O'Brien* teaches of a method for determining a travel scheme that minimizes travel costs for an organization.

In regard to claims 1-5, 7, and 8, the Office Action indicates that *O'Brien* largely teaches Applicant's invention of claim 1. In particular, the Office Action alleges that *O'Brien* teaches of selecting a primary goal (travel model) that would minimize the travel/economic costs incurred by an enterprise by using an objective function that includes business related travel requirements and a constraint function that includes the operational constraints of the enterprise to generate a number of different travel models/scenarios in order to determine a planned travel model that if implemented would achieve the primary goal of the enterprise.

As discussed above, independent claim 1 is being amended to more distinctly point out Applicants' invention. In particular, independent claim 1 has been amended in the preamble to recite a method for visualizing an effect of a strategic constraint on a primary goal of an enterprise. Consistent with the modification to the preamble, claim 1 includes the limitations of determining outcomes of the primary objective function in response to the target values for the constraint function, and presenting a graphical view of the outcomes of the primary objective function for the target values of the constraint function to provide a visualization of the effect of the strategic constraint on the primary goal of the enterprise.

Consequently, the invention of claim 1 yields a number of optimum outcomes of the primary objective function, rather than solving to achieve a single optimum outcome. As discussed in Applicant's specification in connection with the Goal Selection section beginning at paragraph [0097] through the Constraint

Mapping routine ending at paragraph [0120], and in further
connection with Figures 1, 6-9, and 16, the invention of claim 1
presents to the user an intuitive graphical view of the
dependence of the primary goal on the target value of the
strategic objective. Consequently, strategic planning performed
by a user, and its implications, is facilitated with this
graphical view of the dependence of the primary goal on the
target values of the strategic constraint (paragraph [0027] of
Applicant's specification).

O'Brien does not disclose the optimizing, determining, and
presenting operations of amended independent claim 1. In
particular, O'Brien fails to present a graphical view of multiple
outcomes of the primary objective function related to the target
values of the constraint function (i.e., the claimed "presenting
a graphical view of said outcomes of said primary objective
function for said target values of said constraint function").
Rather, O'Brien discloses applying the constraints to the
objective function to determine a solution of the objective
function that satisfies the constraints and that minimizes the
travel costs of the organization (page 19, lines 5-11). O'Brien
achieves this goal utilizing a linear programming technique for
solving multi-variable systems in terms of a set of best values
for maximizing or minimizing the system. As stated in W.L. Gore
& Associates v. Garlock Inc., 220 USPQ 303, 313 (Fed. Cir. 1983),
cert. denied, 469 U.S. 851 (1984):

> Anticipation requires the disclosure in a single
> prior art reference of each element of the claim under
> consideration.

O'Brien does not disclose optimizing the primary objective
function over a range of target values for the constraint
function, determining outcomes of the primary objective function

in response to the target values for the constraint function, and presenting a graphical view of the outcomes of the primary objective function for the target values of the constraint function to provide a visualization of the effect of the strategic constraint on the primary goal of the enterprise. Consequently, *O'Brien* fails to anticipate Applicant's invention of amended independent claim 1. As such, Applicant respectfully requests the withdrawal of the rejection of claim 1, as amended, under 35 U.S.C. 102(b). Claims 2-7 depend directly or indirectly from claim 1. Thus, Applicants respectfully request the withdrawal of the rejection of claims 2-7 under 35 U.S.C. 102(b) for the reasons set forth above. In addition, this Amendment cancels claim 8. Therefore, the rejection of claim 8 under 35 U.S.C. 102(b) is moot.

Nor is obvious to modify the invention of *O'Brien* to something more closely resembling Applicant's invention of amended independent claim 1. The proper evaluation for determining patentability is to consider whether the prior art, and not Applicant's specification, suggests modifications which make the prior art device more closely resemble Applicant's invention. As stated in In re Gordon et al., 221 USPQ 1125 at 1127 (Fed. Cir. 1984) and repeated in In re Laskowski, 10 USPQ 1397 at 1398 (Fed. Cir. 1989):

> The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.

The *O'Brien* publication expressly teaches of optimizing to obtain a solution of the objective function that satisfies the constraints and that minimizes the objective function. A report representative of the solution is subsequently generated. *O'Brien* further teaches that once a report has been generated and reviewed, it may be determined that a particular value should be

changed. In response to such a change, the information may be
adjusted and a new solution may be obtained. Several iterations
of this *O'Brien* process may be necessary before a travel scheme
is determined (page 21, lines 5-20). Accordingly, a new solution
is obtained only after a first solution, presented in a report,
is reviewed.

In contrast, Applicant's invention of claim 1 determines and
presents multiple outcomes of the primary objective function
associated with target values for the constraint function. As
discussed in great detail above, it is an advantage of the
present invention to vary the constraint over a range of
scenarios (i.e., target values), and then determine which set of
predicted decisions aligns most favorably with the Primary Goal
and the Strategic Objective. By obtaining solutions (outcomes)
over a broad range of scenarios (target values), the user obtains
a picture of how the optimal predictions vary according to
changes in the desired large-scale goal (i.e., the strategic
objective). By doing so, the user can have control over the
decisions being made, without being locked to a single set of
decisions.

As such, strategic planning performed by a user, and its
implications, is facilitated with this graphical view of the
dependence of the primary goal on the target values of the
strategic constraint (paragraph [0027] of Applicant's
specification). That is, results are presented in graphic form
so that an optimum decision envelope can be visualized for the
selected primary goal in light of the selected strategic
constraint(s). This visualization of the effect of the strategic
constraint on the primary goal is useful for facilitating the
selection of a strategy based on visualizing the effect of such a
strategy. By comparing a number of possible strategic

objectives, a user has advance knowledge of the effect of the
strategic decisions made and can more efficiently align and
optimize an enterprise's operational decisions with its strategic
constraints.

O'Brien fails to provide any motivation or suggestion for
modifying the O'Brien methodology to determine and present
multiple outcomes of the primary objective function associated
with target values for the constraint function. O'Brien fails
to provide any motivation or suggestion because the intent of the
O'Brien methodology differs from the more global ideal of
strategic planning. O'Brien is concerned with providing a
service, i.e., a travel optimization service, that yields a
solution, i.e., a travel scheme that minimizes the travel costs
of an organization. Such a travel optimization service may be
employed by a travel agency and the travel agency may charge a
fee to each organization for providing the service. In such a
case, it would be highly undesirable and even counterproductive
to present multiple solutions, because the multiple solutions
might only serve to confuse and frustrate the customer, i.e., the
organization, whose expectation is a single solution that they
paid a fee for, and can readily implement.

For the reasons set forth above O'Brien fails provide any
motivation or suggestion for modifying O'Brien to produce
something resembling Applicant's claimed determination and
presentation of multiple outcomes of the primary objective
function for target values for the constraint function. Rather,
any motivation or suggestion is found only in Applicant's
specification and not in the prior art. Consequently, the
invention of amended independent claim 1 is not obvious in view
of O'Brien, and claim 1 is believed to be allowable.

While the previous discussion was specifically directed to independent claim 1, the limitations of claim 1 are read into dependent claims 2-7 and 9. Accordingly, the previous discussion applies equally to claims 2-7 and 9, and claims 2-7 and 9 should be found allowable for the above-discussed reasons.

Section 8.2: rejects claims 1-8 under 35 U.S.C. 102(e) as being clearly anticipated by *Kosiba et al.*, U.S. Publication Number 2002/0184069 (hereinafter *Kosiba*). *Kosiba* was filed on 17 May 2002 and claims priority to U.S. Provisional Application No. 60/291.325, filed 17 May 2001.

As discussed above in **Section 7**, the subject matter of the amended claims was disclosed in the parent application (Pat. No. 6,308,162), beginning at col. 4, line 65, through col. 8, line 48, and disclosed in connection with Figures 1-5, 10, and 11. As such, Applicant believes that the subject matter of claims 1-7 and claim 9, as amended herein, should be assigned the benefit of an effective filing date at least as early as 21 May 1998. An effective filing date of 21 May 1998 predates the *Kosiba* Provisional Application No. filing date of 17 May 2001. Consequently, *Kosiba* is not prior art to the present application. Accordingly, Applicant respectfully requests withdrawal of the rejection of the claims in view of *Kosiba*.

Section 9: cites prior art of interest.

Section 9.1: indicates that Applicant must supply the material incorporated from the prior art and mentioned in the specification in paragraphs [0113], [0145], and [0157]. The incorporated prior art is W. Press et al., Numerical Recipes: The Art of Scientific Computing, Cambridge University press, New York (1992), referred to herein as "Numerical Recipes."

The requested material incorporated from the prior art is being submitted herewith in an Appendix E for the Examiner's consideration. Appendix E includes a portion of the "Numerical Recipes" reference that discloses "simulated annealing", as discussed in paragraph [0113]. In addition, Appendix E includes a portion of the "Numerical Recipes" reference that discloses the "Van Wijngaarden-Decker-Brent method", as discussed in paragraph [0145]. Appendix E also includes a portion of the "Numerical Recipes" reference that discloses "Neville's algorithm", as discussed in paragraph [0157].
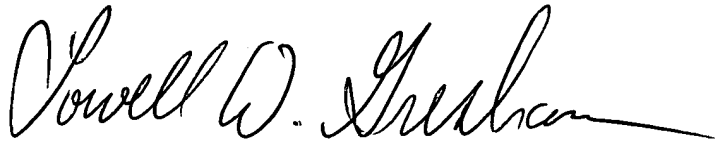
Section 9.2: alleges that the citation number 3 on page 2 of the PTO-1449 information disclosure statement (IDS) filed 31 July 2003, has not been considered, since it could not be located in the parent file or the instant file. Furthermore, the Office Action indicates that this citation is a duplicate citation of citation number 4 on page 2 of the IDS. Upon examination of the citations, it has been determined that citations 3 and 4 are duplicates, and both were inadvertently included in the PTO-1449. As such, consideration of citation 4 on page 2 of the IDS was sufficient.

Accordingly, this Amendment cancels claim 8, amends claims 1, 3, 5, and 6, and adds claim 9. Currently amended claims 1, 3, 5, and 6 remain in the application and are believed to be allowable. In addition, claims 2, 4, and 7 remain in the application as originally submitted, and new claim 9 is included in the application, all of which are believed to be allowable.

    Applicant believes that the foregoing amendments and remarks
are fully responsive to the rejections and/or objections recited
in the 12 May 2004 Office Action and that the present application
is now in a condition for allowance. Accordingly,
reconsideration of the present application is respectfully
requested.

                              Respectfully submitted,

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